

September 24, 2014

Alison Oakley Nevada Division of Environmental Protection (NDEP) Bureau of Corrective Actions 901 South Stewart Street, Suite 4001 Carson City, NV 89701

Subject: NV Energy Reid Gardner Generating Station

Request for Concurrence of Groundwater Monitoring Program Changes

Dear Ms. Oakley:

On December 3, 2010 NV Energy (NVE) submitted a Draft Groundwater Sampling Plan (GSP) to the Nevada Division of Environmental Protection (NDEP) for purposes of the Administrative Order on Consent (AOC). On September 6, 2011 the NDEP provided comments on the Draft GSP requesting that more rationale and documentation be included regarding the discussion of the proposed sampling frequency and parameter list. At the third quarter 2012 AOC meeting between NVE and NDEP, it was agreed that NVE would submit the groundwater monitoring changes rationale as a separate document for NDEP review. The attached Proposed Groundwater Monitoring Program Changes Memo serves as that documentation.

NVE is requesting concurrence of the sampling reductions in the memo. Following NDEP approval, the memo and attachments will be included as an appendix in a future revised GSP submittal.

If there are any questions regarding this submittal, please contact the undersigned at (702) 402-5958.

Sincerely,

Jason Reed, C.E.M.

Staff Environmental Engineer

**NV Energy** 

Enclosure

CC:

Tony Garcia - NV Energy

Mike Rojo - NV Energy

Rebecca Svatos - Stanley Consultants

## Document and Response to Comments Tracking Form NV Energy – Reid Gardner Station Administrative Order on Consent Implementation

Document TitleDraft Groundwater Sampling	Document Title Draft Groundwater Sampling Plan					
Preparer Stanley Consultants, Inc						
Draft #1						
To NV Energy (NVE)	From NDEP					
Submittal Date 12/2010	Comment Date 9/6/2011					
Response Date 9/24/14						
Commenter NDEP	Responder Stanley Consultants, Inc.					
General Comments:						
Comment #1						

General comment, NDEP is aware that several wells have been added, replaced, or abandoned since the submittal of this Deliverable. Please revise this Deliverable to address any changes to the SAP due to these new or abandoned wells.

## Response #1

This comment will be addressed in a revised Groundwater Sampling Plan (GSP) which is tentatively scheduled for submittal in 2015.

### Comment #2

Section 3.5, Page 3-2, NDEP has the following comment: The report states, "Purge water will not be used to fill sample bottles and wells will be allowed to recharge up to 80% of the static water column prior to sample collection". This protocol does not appear to be consistent with the referenced EPA Groundwater Sampling SOPs provided in the QAPP. For instance the U.S. EPA Region 9 Field Sampling Guidance Document #1220, Groundwater Well Sampling states that "It is particularly important that wells be sampled as soon as possible after purging. If adequate volume is available the well must be sampled immediately." In situations where the well is pumped dry, the guidance indicates that this "...generally constitutes an adequate purge and the well can be sampled following sufficient recovery (enough volume to allow filling of all sample container)." NVE should revise this discussion accordingly. Alternatively, NVE could consider using a low flow sampling SOP.

### Response #2

This comment will be addressed in the revised GSP which is tentatively scheduled for submittal in 2015.

### Comment #3

Appendix B, More rationale and documentation should be included regarding the discussion of the proposed sampling frequency and parameter list. For example, some parameters are proposed to be removed for wells that have had historical exceedances (i.e. – chromium and molybdenum in LMW-9) and some analyses are proposed to be reduced without explanation (ie.reduced EPA Method 8260 scan for HM-50 replacement well). The supporting documentation should be included in the Appendix and not as a separate document

## Response #3

At the third quarter 2012 AOC meeting between NVE and NDEP, it was agreed NVE would submit the groundwater monitoring changes rationale as a separate document for NDEP Review. The Groundwater Monitoring Program Changes memorandum serves as that submittal. Following NDEP approval of the memorandum and attachments, those documents will then be included as an appendix to the revised Groundwater Sampling Plan.

Final	
То	From
Submittal Date	Approval Date
Approver	



## **MEMO**

TO:

Alison Oakley, NDEP

DATE: September 24, 2014

FROM:

Jason Reed, NVE Tony Garcia, NVE Mike Rojo, NVE

SUBJECT: DRAFT NVE RGS Proposed

Groundwater Monitoring Program

Changes

On December 3, 2010 NV Energy (NVE) submitted a Draft Groundwater Sampling Plan (GSP) to the Nevada Division of Environmental Protection (NDEP) for purposes of the Administrative Order on Consent (AOC). This submittal included groundwater sampling procedures and changes to the groundwater monitoring requirements from those listed in previous documents. On September 6, 2011 the NDEP provided comments on the Draft GSP requesting that more rationale and documentation be included regarding the discussion of the proposed changes to sampling frequency and parameter list. At the third quarter 2012 AOC meeting between NVE and NDEP held on September 26, 2012, it was agreed that NVE would submit the groundwater monitoring changes rationale as a separate document for NDEP review. The document would then be included as an appendix to the revised Groundwater Sampling Plan after NDEP has approved the sampling reductions. This Proposed Groundwater Monitoring Program Changes memo serves as that documentation. Both well and parameter sampling reductions are proposed.

### **Well Sampling Reductions**

An attempt is made to sample 102 wells during each semi-annual AOC groundwater sampling event at Reid Gardner Station (Station). These wells are listed in a recent sampling guide as seen in Appendix A. The 102 wells do not include abandoned or destroyed wells, nor background, diesel recovery, or mesa pond wells, Because the background wells have already been sampled four times, no semi-annual monitoring has been occurring and they have only been gauged for water levels. Diesel recovery wells are currently only gauged for product. NVE is voluntarily sampling the mesa pond wells and this monitoring is not conducted under the AOC.

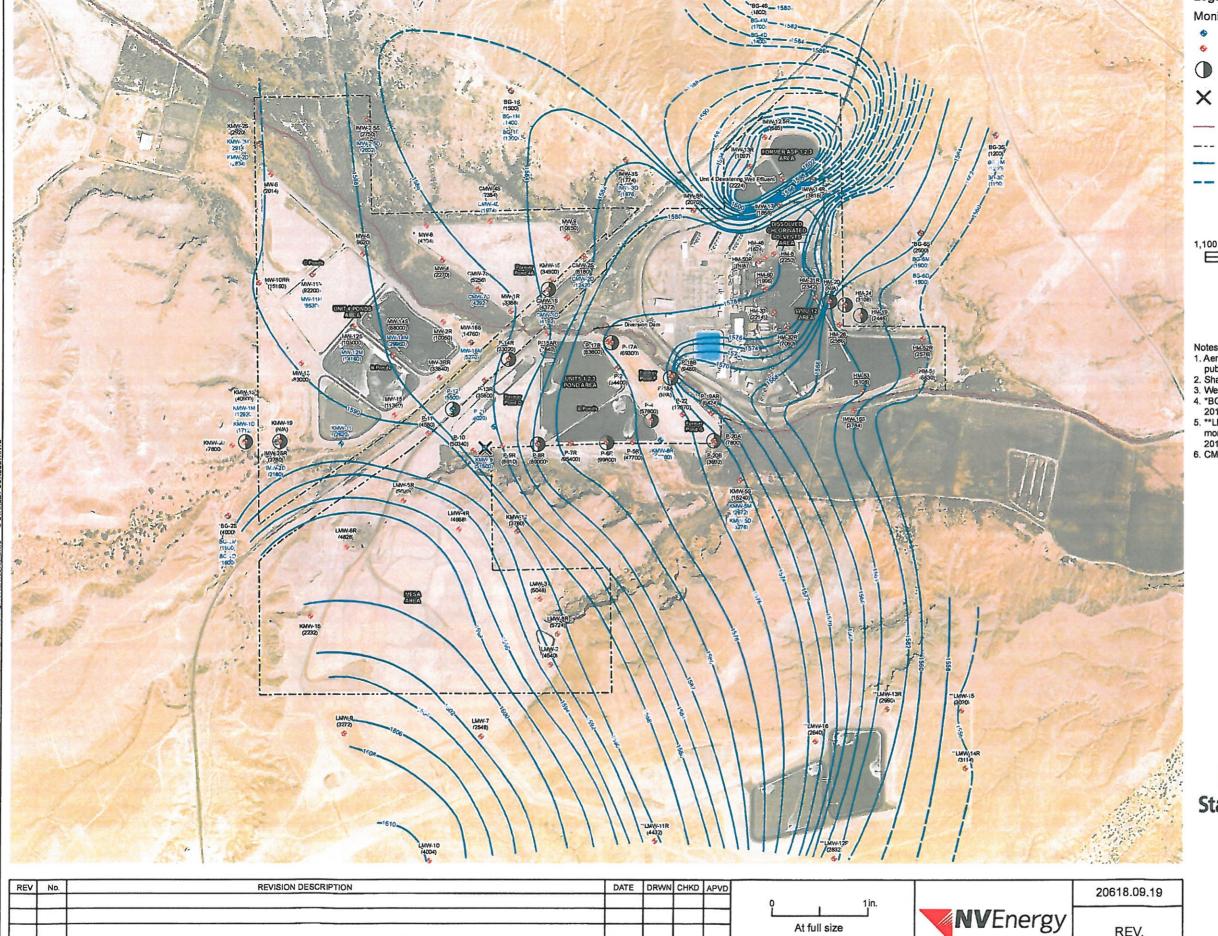
NVE is proposing to reduce the number of AOC wells sampled by 16, as seen in Figure 1. NVE proposes to continue to gauge these wells to gather water level information, unless the well is recommended for abandonment; however, samples for laboratory analysis would not be collected. Because mesa landfill wells are required to be monitored by the Southern Nevada Health District (SNHD) as well as the NDEP, no sampling reductions were considered for these wells.

The rationale for the proposed sampling reductions in each well is provided in Tables 1-4. Historical total dissolved solids (TDS) or arsenic concentrations, depending on the area, were considered as seen in the Appendix B Well Trend Graphs. Those wells for which historical groundwater trends for these two parameters showed little or no variation and were near other wells monitoring the same groundwater interval, are redundant and proposed for removal. In addition, wells with unfavorable conditions, such as obstructions or lack of adequate water for sampling, are also recommended for removal or abandonment (refer to Table 5 of Appendix C, titled Well Maintenance).

## **Parameter Sampling Revisions**

NVE collects samples from wells during each semi-annual event to be analyzed for metals, general chemistry, and volatile organic compound (VOC) parameters, as shown in Tables 1-4. NVE is proposing to discontinue analysis for some of these parameters based on a review of past data. The parameter reductions would be the same for all wells in one area to simplify field operations. Specific parameters are proposed for elimination from future analysis if they have never or rarely been detected in a particular well or group of wells or if there are no established screening levels (refer to Tables 1-4). Certain parameters, though meeting these criteria, are proposed for continued analysis or were added because they are needed to perform field or laboratory quality assurance checks, such as cation/anion balances.

Raw groundwater chemistry data and a detection count pivot chart, of which the parameter sampling revisions are based upon, are provided in Appendix D (CD).



NDEP sumbittal

At full size

1 inch = 1,100 feet

09/24/14 CC/AE AE RLS/TK

## Legend

Monitoring Wells and TDS Concentration (2014 Q1)

- Deep or Medium
- Shallow
- Monitor Groundwater Elevation Only
- X Proposed Abandonment
- \_\_\_ Muddy River
- --- Property Boundary
- Groundwater Elevation Contour (ft) 2014-Q1
- -- Groundwater Elevation Contour (Inferred) (ft) 2014-Q1

1,100	550	0	1,100	2,200	
				Fee	

- Notes:

  1. Aerial imagery provided by USDA-FSA Aerial Photography Field Office; published 11/15/2013; photographs taken Spring 2013

  2. Shallow, medium, and deep well classifications are subject to change

  3. Wells with "N/A" labels were not available for TDS sampling in 2014-Q1

  4. \*BG-1, BG-2, BG-3, BG-4, BG-6 monitoring wells were not sampled in 2014-Q1, so TDS concentrations from 2012-Q4 were used

  5. \*\*LMW-11R, LMW-12R, LMW-13R, LMW-14R, LMW-15, LMW-16 monitoring wells were not sampled in 2014-Q1, so TDS concentrations from 2013-Q3 were used
- 2013-Q3 were used
  6. CMW-3S/D, CMW-5S/D, CMW-6S/D were abandoned July 2014





REV.

September 2014

PROPOSED SAMPLING **REDUCTION LOCATIONS** Groundwater Sampling Plan NV Energy Reid Gardner Station Moapa, NV Figure 1

# NVE Reid Gardner Station AOC Implementation Table 1a Sampling Reduction Summary Unit 1,2,3 and 4 Pond Areas - Wells

Location	Monitoring Zone	Abandon	Monitor Groundwater Elevation Only	Reason or Notes				
Unit 4 Pond Wells								
IMW-2D	Deep							
IMW-2SR	Shallow							
KMW-1D	Deep							
KMW-1M	Medium							
KMW-1S	Shallow		х	Well nearly dry. Will consider replacement in future workplan.				
KMW-19	Shallow		Х	Well cannot be sampled due to roots.				
KMW-20	Shallow							
KMW-11	Medium							
KMW-2D	Deep							
KMW-2M	Medium							
KMW-2S	Shallow							
MW-10RR	Shallow							
MW-2R	Shallow							
MW-3RR	Shallow							
MW-5	Shallow							
MW-6	Shallow							
MW-11S	Shallow							
MW-11M	Medium							
MW-12S	Shallow							
MW-12M	Medium							
MW-13	Shallow							
MW-14S	Shallow							
MW-14M	Medium							
MW-15	Shallow							
MW-16S	Shallow							
MW-16M	Medium							
CMW-1D	Medium			Near MW-1R and similar TDS concentration. Close to KMW-15. Future well cluster to be installed in Former Pond 4A footprint.				
CMW-1S	Shallow			Near MW-1R and similar TDS concentration. Close to KMW-15. Future well cluster to be installed in Former Pond 4A footprint.				
CMW-2D	Medium		S HARRY AN VANDO					
CMW-2S	Shallow							
CMW-4D	Medium		The state of the s					
CMW-4S	Shallow							
CMW-7D	Medium							
CMW-7S	Shallow							
KMW-15	Shallow							
MW-1R	Shallow							

## NVE Reid Gardner Station AOC Implementation

## Table 1a Sampling Reduction Summary Unit 1,2,3 and 4 Pond Areas - Wells

Location	Monitoring Zone	Abandon	Monitor Groundwater Elevation Only	Reason or Notes
MW-4	Shallow			
MW-8	Shallow			
MW-9	Shallow			
IMW-2.5D	Medium			
IMW-2.5S	Shallow			
IMW-3D	Deep			
IMW-3S	Shallow			
			Units	s 1,2,3 Pond Wells
P-2	Shallow			
P-4	Shallow		Х	Stable TDS trend. Close to P-22.
P-5R	Shallow			
P-6R	Shallow		х	TDS has no clear trend. Constructed in 2003 potentially within slurry wall.
P-7R	Shallow			
P-8R	Shallow		Х	TDS has no clear trend. Constructed in 2003 potentially within slurry wall.
P-9R	Shallow			
KMW-9	Medium	х		TDS has no clear trend. Medium well exhibiting shallow conditions.
P-10	Shallow			
P-11	Shallow			
P-12	Medium		х	Stable TDS trend. Close to P-11 and similar TDS concentration. Close to P-13R.
P-13R	Shallow			
P-14R	Shallow		Х	StableTDS trend. Close to P-13R and P-15AR.
P-15AR	Shallow			
P-17A	Shallow		Х	Adjacent to P-17B and similar TDS concentrations.
P-17B	Shallow			
P-18A	Shallow		Х	Dry. Adjacent to P-18B.
P-18B	Shallow			
P-19AR	Shallow			
P-20A	Shallow		V I	TDS has no clear trend. Adjacent to P-20B and similar TDS concentration.
P-20B	Shallow			
KMW-8R	Medium			
P-21	Medium			
P-22	Shallow			
MW-16S	Shallow			
KMW-5S	Shallow			
KMW-5M	Medium			
KMW-5D	Deep			

## NVE Reid Gardner Station AOC Implementation Table 1b Sampling Reduction Summary Units 1,2,3 and 4 Pond Areas - Parameters

Parameter	Discontinue from Monitoring	Reason		
		No detections 1	Rarely Detected	No Screening Levels
General Chemistry				
Bicarbonate*				
Carbonate*				
Chloride				
Fluoride*				
Nitrate as N				
Specific Conductance				
Sulfate				
Sulfide				
Sulfite				
Total Dissolved Solids				
Total Organic Carbon				<del> </del>
Total Suspended Solids	Х			Х
Turbidity				
Metals				
Arsenic				
Beryllium	Х		X (3/1028)	****
Boron				
Cadmium				
Calcium				
Chromium				
Magnesium		***		
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Sodium				
Strontium				
Titanium	Х		X (12/1029)	
Vanadium				
Zinc				
*Parameter addition for la	1 - C-11			

<sup>\*</sup>Parameter addition for lab or field consistency checks (i.e. cation/anion balance)

<sup>&</sup>lt;sup>1</sup> No detections above laboratory reporting limits

## NVE Reid Gardner Station AOC Implementation Table 2 Sampling Reduction Summary Former ASP 1,2,3 Area

Location (all shallow monitoring zone)	Abandon	Monitor Groundwater Elevation Only	Reason	
IMW-12.5R	vavadise!			
IMW-13R				
IMW-14R				
IMW-17				
IMW-9R				

Parameter	Discontinue from Monitoring	Reason		
		No detections 1	Rarely Detected	No Screening Levels
General Chemistry				
Bicarbonate*				
Carbonate*				
Chloride				
Fluoride				
Nitrate as N				
Phosphates	Х			Х
Specific Conductance*				
Sulfate				
Sulfide				
Sulfite				
Total Dissolved Solids				
Total Organic Carbon				
Total Suspended Solids	Х			X
Turbidity				
Metals				
Arsenic				
Barium				
Beryllium	Х	х		
Boron				
Cadmium	Х	Х		
Calcium				
Chromium				
Magnesium				
Manganese				
Molybdenum				
Nickel	х		X (3/120)	
Potassium*			,	
Selenium				
Sodium				
Strontium				
Titanium	х		X (10/120)	

## NVE Reid Gardner Station AOC Implementation Table 2 Sampling Reduction Summary Former ASP 1,2,3 Area

Parameter	Discontinue from Monitoring	Reason		
		No detections 1	Rarely Detected	No Screening Levels
Vanadium				
Zinc				
<u>Organics</u>				
VOC 8260 Full Scan				

<sup>\*</sup>Parameter addition for lab or field consistency checks (i.e. cation/anion balance)

<sup>&</sup>lt;sup>1</sup> No detections above laboratory reporting limits

## NVE Reid Gardner Station AOC Implementation

## Table 3 Sampling Reduction Summary Dissolved Chlorinated Solvents Area

Location (all shallow monitoring zone)	Discontinue from Monitoring	Monitor Groundwater Elevation Only	Reason
HM-48			
HM-50 R			
HM-51			
HM-8			

	<del></del>		
Discontinue from Monitoring	Reason		
	No detections 1	Rarely Detected	No Screening Levels
X			Х
			· · · · · · · · · · · · · · · · · · ·
Х	X		
Х	Х		
Х	Х	X (2/45)	
	x X X	from Monitoring  No detections   X  X  X  X  X  X  X  X  X  X  X  X  X	from Monitoring  No detections 1 Rarely Detected  X  X  X  X  X  X  X  X  X  X  X  X  X

<sup>\*</sup>Parameter addition for lab or field consistency checks (i.e. cation/anion balance)

<sup>&</sup>lt;sup>1</sup> No detections above laboratory reporting limits

## NVE Reid Gardner Station AOC Implementation Table 4 Sampling Reduction Summary Waste Management Unit-12 Area

Location	Abandon	Monitor Groundwater Elevation Only	Reason
HM-19		Х	Stable arsenic trend. Close to HM-28, HM-31R, and HM-52R.
HM-20		X	Free Product. Close to HM-28, HM-31R, and HM-52R.
HM-24		X	Stable arsenic trend. Close to HM-28, HM-31R, and HM-52R.
HM-28			
HM-31R			
HM-32R			
HM-33			
HM-52R			
HM-53			
HM-54			
HM-60			
Unit 4 Dewatering Well Effluent			

Parameter	Discontinue from Monitoring		Reason	
		No detections 1	Rarely detected	No Screening Levels
General Chemistry				
Bicarbonate*				
Carbonate*				
Chloride				
Fluoride*				
Nitrate as N				
Phosphates	X			X
Specific Conductance				
Sulfate				
Sulfide				
Sulfite				
Total Dissolved Solids				
Total Organic Carbon				
Total Suspended Solids	X			X
Turbidity*				
Metals				
Arsenic				
Barium				
Beryllium	X	X		
Boron				
Cadmium	X	X		

## NVE Reid Gardner Station AOC Implementation Table 4 Sampling Reduction Summary Waste Management Unit-12 Area

Parameter	Discontinue from Monitoring		Reason	
		No detections 1	Rarely detected	No Screening Levels
Calcium				
Chromium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium*				
Selenium				
Sodium				
Strontium				
Titanium	Х		X (15/182)	
Vanadium				
Zinc				
Organics				
VOC 8260 Full Scan				

<sup>\*</sup>Parameter addition for lab or field consistency checks (i.e. cation/anion balance)

<sup>&</sup>lt;sup>1</sup> No detections above laboratory reporting limits

## APPENDIX A Recent GMR Sample Record

SEMI-A  WELL NUMBER  LMW-2  LMW-3  LMW-4	Scmi-Annual - Sam	ples will be co	ollected in Fe MON	bruary (1st Q	tr) and August	, August (3rd Qtr), and November (4th Qtr). (3rd Qtr).
LMW-2 LMW-3		20		LIURING V	21 INV	
LMW-2 LMW-3		1 20		P COTTE		1
LMW-2 LMW-3	EDECHENCY		14 SAMPLE	S COLLEC	TED	755.555
LMW-3	FREQUENCY	1ST QTR	2ND QTR	3RD QTR	4TH QTR	REMARKS
LMW-3				Mesa Wells		
	SEMI-A*	Х		111000 110110		Sampled 2/27/2014
I MW-4	SEMI-A*	Х	1 1			Sampled 2.27/2014
	ABANDONED					Well abandoned July 2011
LMW-4R	SEMI-A*	Х				Sampled 2/26/2014
LMW-5 LMW-5R	ABANDONED SEMI-A*	3/				Well abandoned July 2011
LMW-6	ABANDONED	Х				Sampled 2/26/2014 Well abandoned July 2011
LMW-6R	SEMI-A*	х	1			Sampled 2/26/2014
LMW-7	SEMI-A*	X	1 1			Sampled 2/24/2014
LMW-8	ABANDONED		1 1			Well abandoned July 2011
LMW-8R	SEMI-A*	Х				Sampled 2/27/2014
LMW-9	SEMI-A*	X				Sampled 2/24/2014
LMW-10 LMW-11	SEMI-A*	Х				Sampled 2/24/2014
KMW-12	NOT SAMPLED SEMI-A*	х				NOT SAMPLED ANY MORE Sampled 2/27/2014
KMW-13	ABANDONED					Well abandoned Nov 2005
KMW-16	SEMI-A*	х				Sampled 2/24/2014
KMW-17	ABANDONED	4118		2.1821117		h
			Ün	nit 4 Pond W	ells	
MW-11S	SEMI-A	х				Sampled 2/25/2014
MW-11M	SEMI-A	X				Sampled 2/25/2014
MW-12S MW-12M	SEMI-A	X				Sampled 2/25/2014
MW-13	SEMI-A SEMI-A	X				Sampled 2/25/2014
MW-14S	SEMI-A	x				Sampled 2/25/2014 Sampled 2/25/2014
MW-14M	SEMI-A	X				Sampled 2/25/2014
MW-15	SEMI-A	х				Sampled 2/25/2014
MW-16S	SEMI-A	Х				Sampled 2/25/2014
MW-16M	SEMI-A	Х				Sampled 2/25/2014
IMW-2D	SEMI-A	Х				Sampled 2/25/2014
IMW-2S IMW-2SR	ABANDONED	- V	-			Well abandoned July 2011
KMW-1D	SEMI-A SEMI-A	X X				Sampled 2/25/2014 Sampled 2/25/2014
KMW-IM	SEMI-A	X				Sampled 2/25/2014 Sampled 2/25/2014
KMW-1S	SEMI-A	X				Sampled 2/25/2014
KMW-19	SEMI-A	Х			6-25 4/65	Not sampled, too many roots
KMW-20	SEMI-A	Х				Sampled 2/25/2014
KMW-11	SEMI-A	Х				Sampled 2/25/2014
KMW-2D	SEMI-A	Х	-			Sampled 2/24/2014
KMW-2M KMW-2S	SEMI-A SEMI-A	X	-			Sampled 2/24/2014
MW-10R	ABANDONED	х	-			Sampled 2/24/2014 Well abandoned July 2011
MW-10RR	SEMI-A	х				Sampled 2/25/2014
MW-2R	SEMI-A	X	1			Sampled 2/25/2014
MW-3R	ABANDONED	9 1 1 1 1				Well abandoned July 2011
MW-3RR	SEMI-A	Х				Sampled 2.25/2014
MW-5	SEMI-A	Х				Sampled 2/25/2014
MW-6	SEMI-A	Х	-			Sampled 2/25/2014
MW-7 CMW-ID	ABANDONED	v	-			Well abandoned July 2011
CMW-ID	SEMI-A SEMI-A	X	-			Sampled 2/24/2014 Sampled 2/24/2014
CMW-2D	SEMI-A	x	-			Sampled 2/24/2014 Sampled 2/24/2014
CMW-2S	SEMI-A	X	-			Sampled 2/24/2014 Sampled 2/24/2014
CMW-3D	ABANDONED	X				Well abandoned July 2014
CMW-3S	ABANDONED	X				Well abandoned July 2014
CMW-4D	SEMI-A	Х				Sampled 2/24/2014
CMW-4S	SEMI-A	X				Sampled 2/24/2014
CMW-5D	ABANDONED	X	-			Well abandoned July 2014
CMW-5S CMW-6D	ABANDONED	X	-			Well abandoned July 2014
CMW-6S	ABANDONED	X	-			Well abandoned July 2014 Well abandoned July 2014
CMW-7D	SEMI-A	X	H			Sampled 2/24/2014
MW-7S	SEMI-A	X	F			Sampled 2/24/2014
MW-15	SEMI-A	X				Sampled 2/24/2014
1W-IR	SEMI-A	Χ				Sampled 2/24/2014
IW-4	SEMI-A	Х				Sampled 2/25/2014
IW-8	SEMI-A	Х				Sampled 2/24/2014
1W-9	SEMI-A	X				Sampled 2/25/2014
MW-2.5D	SEMI-A	X	L			Sampled 2/24/2014
MW-2.5S MW-3D	SEMI-A	X	<u> </u>			Sampled 2/24/2014
	SEMI-A SEMI-A	X	_			Sampled 2/27/2014 Sampled 2/27/2014
MW-3D MW-3S						100000 A 212 / 2014

QTRLY	Quarterly - Samples	will be colle	cted in Februa	ary (1st Qtr)	, May (2nd Ot	r), August (3rd Qtr), and November (4th Qtr).	
SEMI-A	Semi-Annual - Sam	ples will be c	ollected in Fe	bruary (1st	Qtr) and Augus	st (3rd Qtr).	
		200000000000000000000000000000000000000					
	I CLAMPY PAGE	~			S (Continued	)	
WELL NUMBER	SAMPLING FREQUENCY		14 SAMPLE		4TH OTR	REMARKS	
	FREQUENCY	11ST QTR		11,2,3 Pond		<u> </u>	
P-IR	ABANDONED		Uni	1 1,2,3 POHO	Weils	Well abandoned March 2013	
P-2	SEMI-A	х			1	Sampled 2/25/2014	
P-3	DESTROYED				1	Well destroyed by construction Q1 2009	
P-4	SEMI-A	х			1	Sampled 2/25/2014	
P-5R	SEMI-A	Х			1	Sampled 2/25/2014	
P-6R	SEMI-A	Х			1	Sampled 2/25/2014	
P-7R	SEMI-A	х			1	Sampled 2/25/2014	
P-8R	SEMI-A	Х			]	Sampled 2/25/2014	
P-9	ABANDONED					Well abandoned March 2013	
P-9R	SEMI-A	Х				Sampled 2/25/2014	
KMW-9	SEMI-A	Х			1	Sampled 2/26/2014	
P-10	SEMI-A	Х			1	Sampled 2/25/2014	
P-11	SEMI-A	X				Sampled 2/26/2014	
P-12	SEMI-A	X		ļ		Sampled 2/26/2014	
P-13R	SEMI-A	X			-	Sampled 2/26/2014	
P-14R	SEMI-A	X			-	Sampled 2/26/2014	
P-15AR P-17A	SEMI-A SEMI-A	X			-	Sampled 2/26/2014	
P-17B	SEMI-A	X				Sampled 2/25/2014 Sampled 2/25/2014	
P-18A	SEMI-A	X			-	Gauged 2/25/2014, No Sample, well was dry	
P-18B	SEMI-A	X			1	Sampled 2/25/2014, No Sample, well was dry	
P-19A	ABANDONED				-	Well abandoned July 2011	
P-19AR	SEMI-A	х				Sampled 2/26/2014	
P-20A	SEMI-A	X				Sampled 2/26/2014	
P-20B	SEMI-A	X		-	1	Sampled 2/26/2014	
KMW-8R	SEMI-A	х				Sampled 2/25/2014	
P-21	SEMI-A	Х				Sampled 2/26/2014	
P-22	SEMI-A	х			1	Sampled 2/26/2014	
KMW-5D	SEMI-A	х			1	Sampled 2/27/2014	
KMW-5M	SEMI-A	х				Sampled 2/27/2014	
KMW-5S	SEMI-A	х			THE PROPERTY.	Sampled 2/27/2014	
KMW-4D	DESTROYED	the con			# THE THE	Well destroyed by livestock Q4 2004	
KMW-4M	DESTROYED	The state of the s				Well destroyed by livestock Q4 2004	
KMW-4S	DESTROYED	70 7 17				Well destroyed by livestock Q4 2004	
IMW-16S	SEMI-A	Х			1000	Sampled 2/26/2014	
IMW-16D	DESTROYED					Well destroyed Q2 2009	
MONITORING WELL REPOI Field Depth to Groundwater Groundwater Elevation	Lab Specific Conductance TDS		METERS (T	o be done Q	Dissolved Me Arsenic Beryllium	etals ONLY Molybdenum Nickel	
рН	Chloride				Boron	Potassium	
	Nitrate as N				Cadmium	Selenium	
	Sulfate				Calcium	Sodium	
					Chromium	Titanium	
Magnesium Vanadium							
Manganese							
ANALYZE FOR THESE PARAMETERS FOR THESE WELLS IN ADDITION TO THE REGULAR PARAMETERS							
	METERS FOR THE	SE WELLS					
Fluoride				KMW-1D		IMW-9R HM-28	
Strontium					P-3	IMW-12.5R HM-52R	
Sulfide (H2S)					P-4	IMW-13R HM-53	
Sulfite					P-5R	IMW-14R HM-54	
Total Organic Carbon					P-6R	IMW-17	
					P-7R		
				MW-2R	P-8R		
Turbidity							
Turbidity			•	MW-3RR	P-9		
Turbidity			•	MW-3RR MW-4	P-9 P-9R		
Total Suspended Solids Turbidity Zinc			P P	MW-3RR MW-4 MW-7	P-9 P-9R P-10		
Turbidity			P P P	MW-3RR MW-4 MW-7	P-9 P-9R		

QTRLY	Quarterly - Samples	will be colle	cted in Febru	ary (1st Qtr),	May (2nd Qtr)	), August (3rd Qtr), and November (4th Qtr)
SEMI-A	Semi-Annual - Sam	ples will be c	ollected in Fe	bruary (1st Q	tr) and August	(3rd Qtr).
					- Min - 3	
		ADDIT	IONAL MO	NITORING	WELLS (Con	ntinued)
			Forn	er ASP-1,2,	Area	
WELL NUMBER	SAMPLING	2014 SAMPLES COLLECTED			TED	
WELL NUMBER	FREQUENCY	1ST QTR	2ND QTR	3RD QTR	4TH QTR	REMARKS
MW-9R	SEMI-A	X				Sampled 2/26/2014
MW-12.5R	SEMI-A	Х	1			Sampled 2/26/2014
MW-13R	SEMI-A	Х				Sampled 2/26/2014
MW-14R	SEMI-A	X	]			Sampled 2/26/2014
MW-15	ABANDONED					Well abandoned March 2013
MW-17	SEMI-A	х				Sampled 2/26/2014

## MONITORING WELL REPORTING AND ANALYSIS PARAMETERS (To be done QTRLY)

Depth to Groundwater

Groundwater Elevation pН

Lab VOC 8260 Full Scan TDS Chloride

Sulfate Nitrate as N Phosphates as P Dissolved Metals Only

Arsenic Manganese Molybdenum Barium Beryllium Nickel

Boron Selenium Cadmium Sodium Calcium Titanium Chromium Vanadium

Magnesium

			Dissolved C	hlorinated S	olvents Area	
WELL NUMBER	SAMPLING	20	14 SAMPL	ES COLLEC	TED	DOM: DVG
WELL NUMBER	FREQUENCY	1ST QTR	2ND QTR	3RD QTR	4TH QTR	REMARKS
HM-8	SEMI-A	Х				Sampled 2/27/2014
HM-48	SEMI-A	х				Sampled 2/27/2014
HM-50	DESTROYED					Well paved over Q3 2009
HM-50R	SEMI-A	Х				Gauged 3/4/2014, no sample, free product
HM-51	DESTROYED	N - U M - U				Well destroyed by construction Q1 2008

### MONITORING WELL REPORTING AND ANALYSIS PARAMETERS (To be done QTRLY)

<u>Field</u> Depth to Groundwater Groundwater Elevation <u>Lab</u> VOC 8260 Full Scan Ethylene TDS Chloride Sulfate Nitrate as N Phosphates as P

Dissolved Metals Only

Arsenic Manganese Molybdenum Barium Beryllium Nickel Boron Sclenium Cadmium Sodium Calcium Titanium Chromium Vanadium

Magnesium

QTRLY	Quarterly - Samples	will be colle	cted in Febru	ary (1st Qtr),	May (2nd Qtr)	, August (3rd Qtr), and November (4th Qtr).
SEMI-A	Semi-Annual - Samp	oles will be co	ollected in Fe	bruary (1st Q	r) and August	(3rd Qtr).
	3 - 10 - 10 - 10 - 10					
		ADDIT	IONAL MO	NITORING	WELLS (Con	ntinued)
			Waste Ma	nagement U	nit-12 Area	
WELL MINDED	SAMPLING	20	14 SAMPLI	ES COLLEC	TED	DELVI DVO
WELL NUMBER	FREQUENCY	IST QTR	2ND QTR	3RD QTR	4TH QTR	REMARKS
IM-19	SEMI-A	Х	, ,			Sampled 2/27/2014
IM-20	SEMI-A	х				Gauged 3/4/2014, no sample, free product
IM-24	SEMI-A	Х	1			Sampled 2/27/2014
IM-28	SEMI-A	Х	1			Sampled 2/27/2014
IM-31R	SEMI-A	Х	1			Sampled 2/27/2014
IM-32	ABANDONED					Well abandoned July 2011
IM-32R	SEMI-A	Х	X Sampled 3/4/2014		Sampled 3/4/2014	
M-33	SEMI-A	Х				Sampled 3/4/2014
IM-52	ABANDONED					Well abandoned July 2011
IM-52R	SEMI-A	Х				Sampled 3/4/2014
IM-53	SEMI-A	Х				Sampled 3/4/2014
IM-54	SEMI-A	Х				Sampled 3/4/2014
IM-60	SEMI-A	Х				Sampled 3.4/2014
Init 4 Dewatering Well Effluent	SEMI-A	Х				Sampled 2/26/2014

MONITORING WELL REPORTING AND ANALYSIS PARAMETERS (To be done QTRLY)

ANALYZE FOR THESE PARAMETERS IN THE UNIT 4 DEWATERING WELL EFFLUENT IN ADDITION TO THE REGULAR PARAMETERS

Depth to Groundwater\*
Groundwater Elevation\*

Lab TDS Chloride Sulfate Dissolved Metals Only
Arsenic Manganese
Barium Molybdenum
Beryllium Nickel

Fluoride Strontium Sulfide (H2S) Sulfite

Nitrate as N Phosphates as P Beryllium Nickel Sul Boron Sclenium Sul Cadmium Sodium Tot Calcium Titanium Tot

Total Organic Carbon Total Suspended Solids Turbidity

Chromium Vanadium Magnesium

Turbidity Zinc

\*except Unit 4 Dewatering Well Effluent

	SURFACE WATER ELEVATIONS								
POND NUMBER	SAMPLING	20	14 SAMPLI	ES COLLEC	TED	REMARKS			
1 OND NOMBER	FREQUENCY	1ST QTR	2ND QTR	3RD QTR	4TH QTR	REMARKS			
MR Upstream	QTRLY	X				Measured 3/4/2014			
MR Midstream	QTRLY	X				Measured 3/4/2014			
MR Downstream1*	QTRLY	X				Measured 3/4/2014			
MR Downstream2*	QTRLY	X				11/20/2013 - No Flow in Upper Culvert			

### SURFACE ELEVATIONS REPORTING (To be done QTRLY)

<u>Field</u>

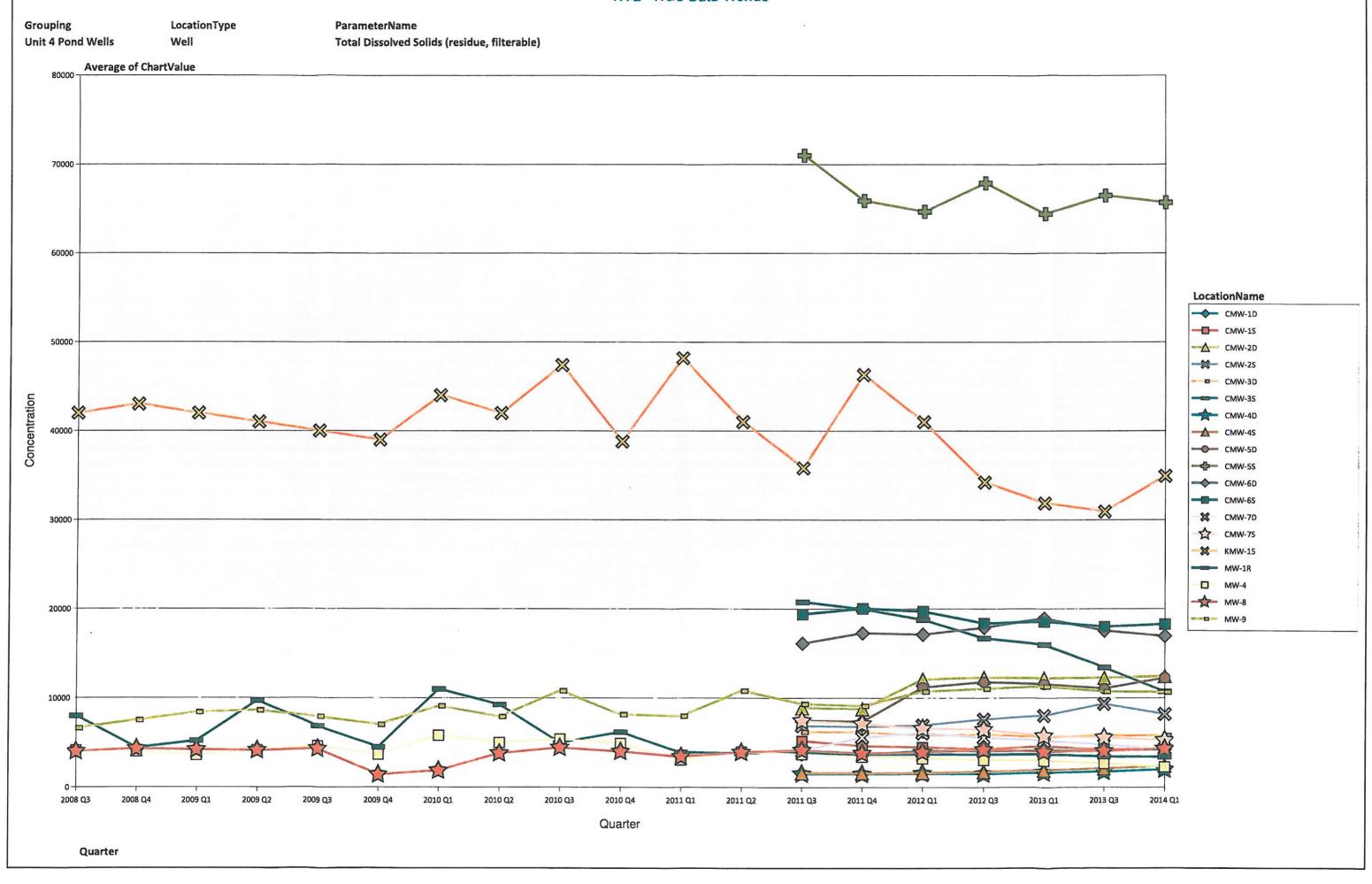
DTW

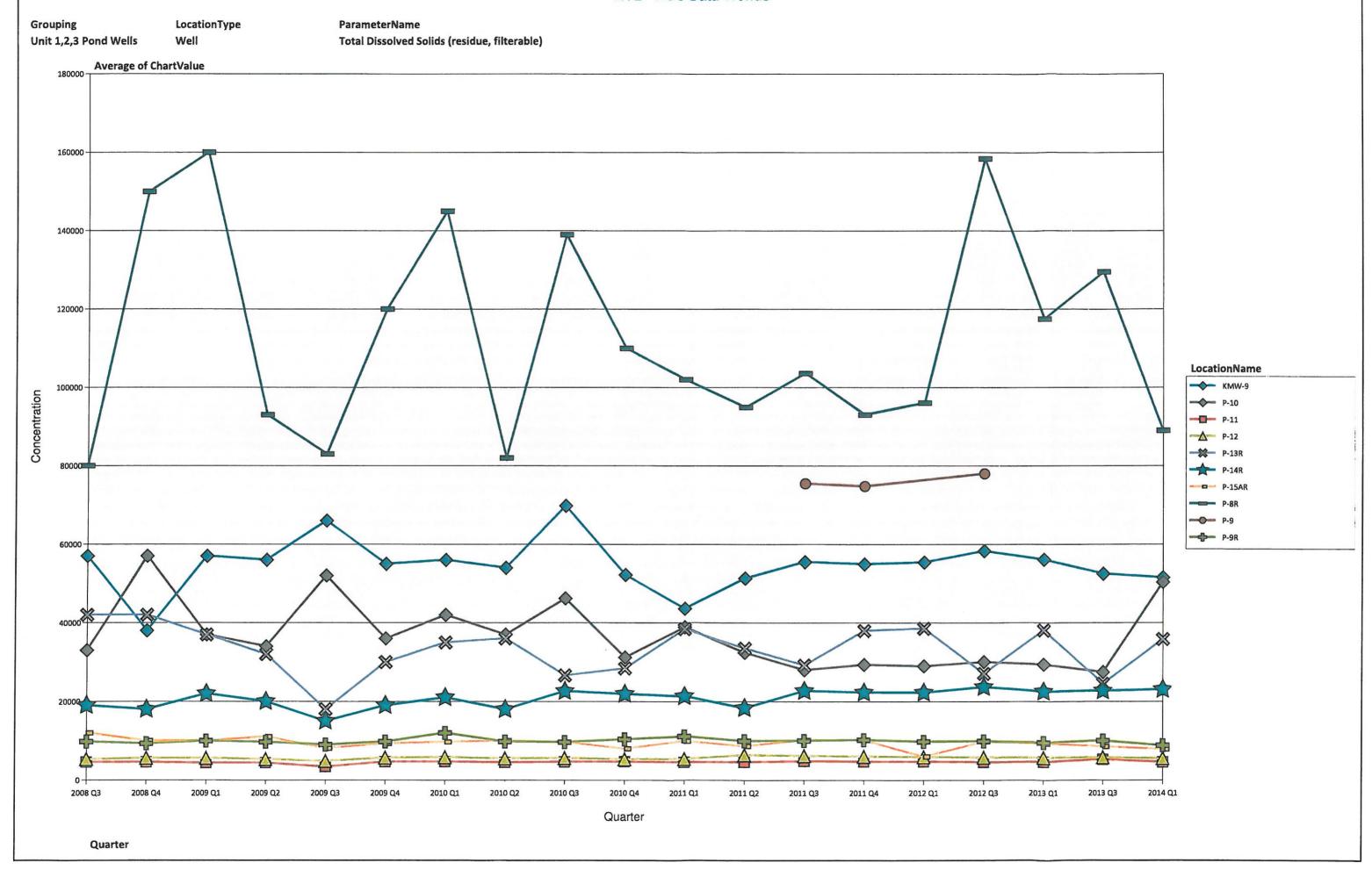
Surfacewater Elevation

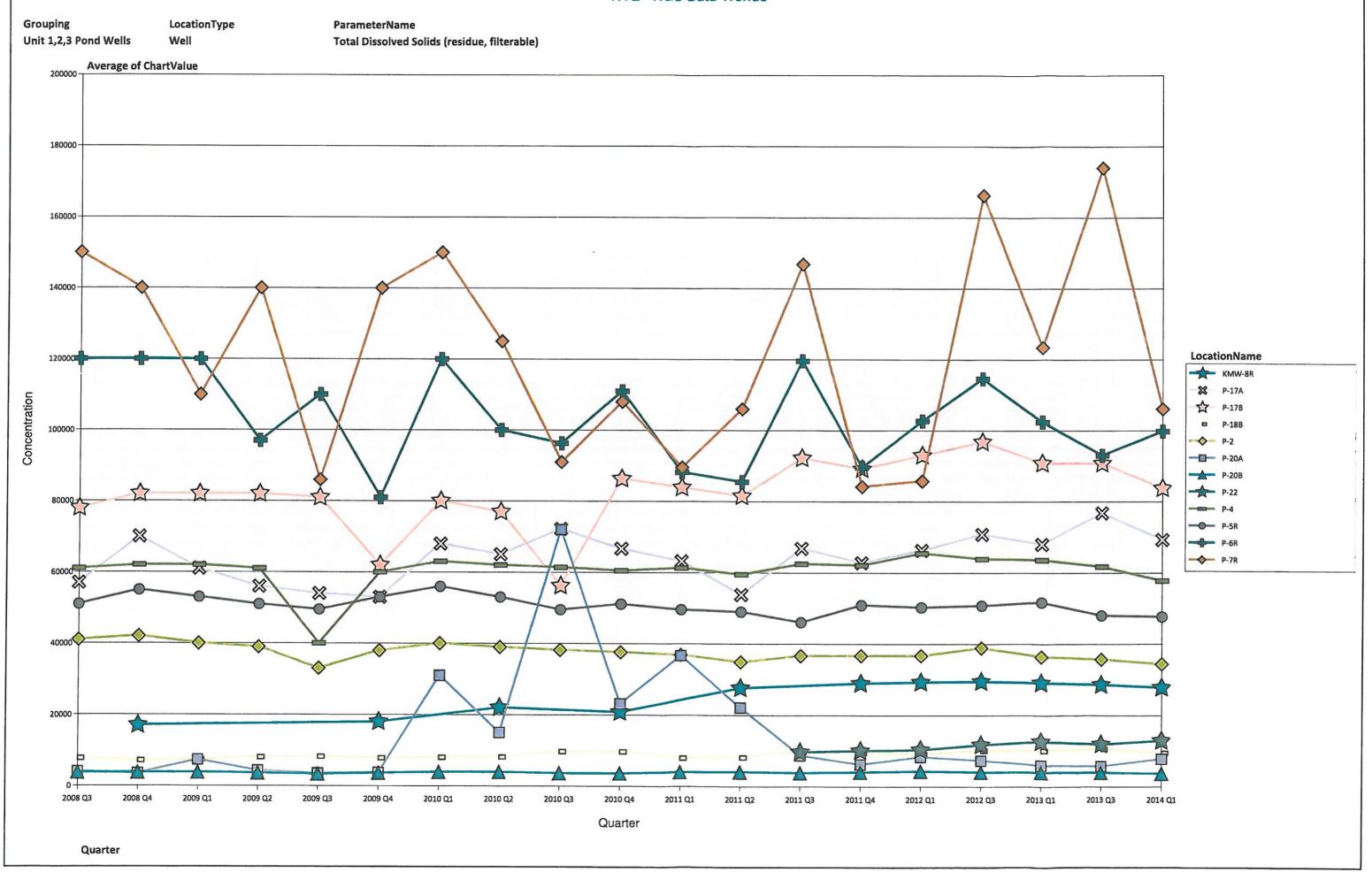
MR - Muddy River

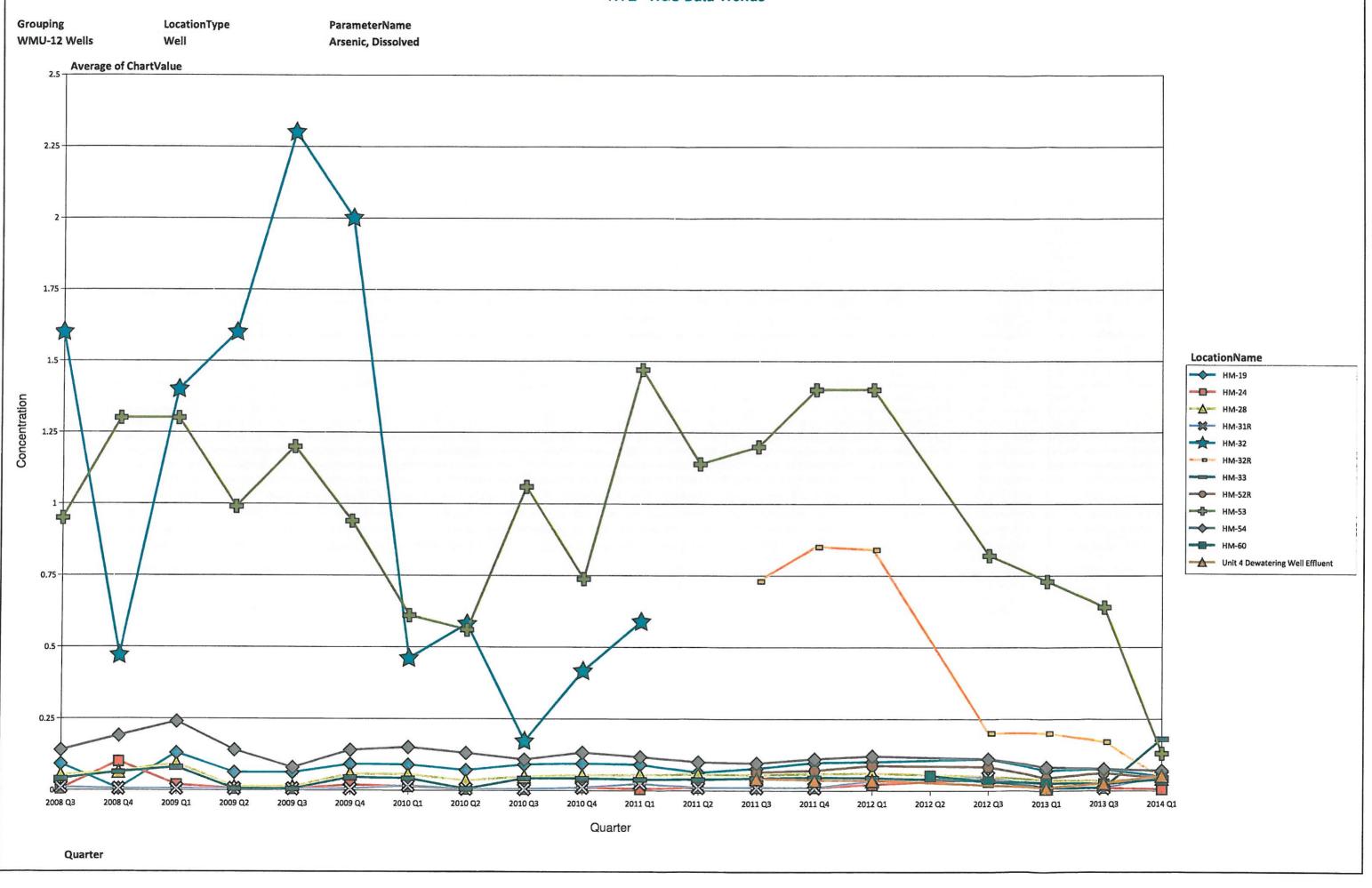
\*Downstream 1 OR Downstream 2 should be gauged, depending on river stage

## APPENDIX B Well Trend Graphs









## APPENDIX C Well Maintenance Table

Table 5 - Well Maintenace 1st Quarter 2014 NV Energy- Reid Gardner Station DRAFT FOR PRELIMINARY DISCUSSION PURPOSES

Action to be taken 2014	Action to be taken after 2014	Continue observing	New well observation added 1st qtr 2014	Action taken on well in 2013

		Well							
Area Location	Well ID	Construction Date	Construction Field Observations  3rd qtr 2012	Recommendation January 2013	Field Observations 1st qtr	Field Observations		Field Observations	
						STOR HE SOTS	Necommendation October 2013	1st qtr 2014	Recommendation March 2014 Assuming Pond 4A Solids Removal Workplan is
Unit 4 Pond Wells	CMW-3S	9/28/2004	Clear	Due nothing. Eventually cease sampling as proposed in GSP	Sifty	Cloudy	Abandon (Pond 4A solids removal workplan)	Cloudy brown	approved, plug and abandon 2nd qtr 2014. Replace with one well cluster in center of the pond.
Unit 4 Pond Wells	CMW-3D	9/28/2004	Clear	Due nothing Eventually cease sampling as proposed in GSP	Clear	Clear	Abandon (Pond 4A solids removal workplan), Clear		Assuming Pond &A Solids Removal Workplan is approved, plug and abandon 2nd gtr 2014 Replace with one well cluster in center of the pond.
Unit 4 Pond Wells	CMW-55	9/30/2004	Silty	Redevelop	Redeveloped 1st qtr 2013	Sity Parameter concentraitons remained the same.	Abandon (Pond 4A solids removal workplan). Replace with one well in center of the pond footprint following solids removal	hsh	Assuming Pond 4A Solids Removal Workplan is approved, plug and abandon 2nd qtr 2014. Replace with one well cluster in center of the pond.
Unit∢PondWells	CMW-5D	9/30/2004	Silty	Recievelop	Redeveloped 1st qtr, 2013	Cloudy, Parameter concentrations remained the same after redeveloping	Abandon (Pond 4A solids removal workplan). Little cloudy		Assuming Pond 4A Solids Removal Workpian is approved plug and abandon 2nd gtr 2014, Replace with one well cluster in center of the pond
Unit 4 Pond Wells	CMW-65	10/1/2004	SHty	Due nothing. Eventually cease sampling as proposed in GSP	પ્રાાંડ	Alis	Abandon (Pond 4A solids removal workplan).		Assuming Pond 4A Solids Removal Workplan is approved, plug and abandon 2nd gtr. 2014. Replace with one well cluster in center of the pond.
Unit 4 Pond Wells	CMW-6D	10/1/2004	Clear	Due nothing Eventually cease sampling as proposed in GSP	Siightly, Siity	Cloudy	Abandon (Pond 4A solids removal workplan).	Clear	Assuming Pond 4A Solids Removal Workplan is approved plug and abandon 2nd qtr 2014 Replace with one well cluster in center of the pond.
Unit 1,2,3 Pond Wells	P-18A	1986	Dry [Wood debns]	Brush clean	Dry	Dry. Not sampled		Dry. Not sampled	Plug and abandon with Pond 4A mobilization.Request NDEP approval. Replace in future with deeper well (Muddy River Workplan).
Unit 1,2,3 Pond Wells	KWW-9	3/18/1998	Exhibiting similar quality as shallow wells. Possible cracked casing. Aquifer test conducted	Evaluate aquiler test resuits. Possible replacement.	Exhibits similar water quality as shallow wells Aquifer test inconclusive	Exhibits similar compart of the state of the state of the shallow wells	× 8	ter .	Because this was a well originally intended to monitoring deeper gw, and monitoring interval is unclear, cease sampling and use as water level only. Request NDEP approval Potentially replace with medium depth 4" well with future replace.
Unit 4 Pond Wells	KWW-19	2/28/2000	Sity, Hand bailed dry, 1	NA	Silty, Hand bailed dry.	Not sampled.	Water level can still be obtained. Observe status 1st qtr 2014. If roots still an issue, cease sampling starting 3rd qtr 2014 and use as water level only.		Cease sampling starting 3rd qtr 2014 and use as water level until possible. Request NDEP approval.
Unit 4 Pand Wells	MW-115	N E102/72/2	NA	NA	NA	NA	NA.	Concrete collar broken, vault broken, F cannot bolt down lid n	Concrete collar broken, valit broken, Repair collar and vadit with Pond 4A cannot bolt down lid   mobilization.
Unit 1,2,3 Pond Wells	KMW-35	4/9/1998 NA		NA	NA	NA	NA	No lock or tag Protective casing is Cloose	Review KMW-5 1st qr.2014 sample results. Depending on levels, potentially plug and abandon using ATV rig or repair.
Unit 1,2,3 Pond Wells	KMW-3M	4/9/1998 NA		NA 0	NA	NA	NA I	No lock or tag. Protective casing is R foose Concrete base D is off the ground.	No lock or tag  Protective casing is Review KIMW-5 1st qr 2014 sample results. Gose. Concrete base Depending on levels, potentially plug and is off the ground.  Bandon using ATV IIg or repair
Unit 1,2,3 Pond Wells	KMW-3D	4/9/1998		NA	NA	NA	NA IS	i i	Review KMW-5 1st or 2014 sample results Depending on levels, potentially plug and abandon using ATV rig or repair.

Table 5 - Well Maintenace 1st Quarter 2014 NV Energy- Reid Gardner Station DRAFT FOR PRELIMINARY DISCUSSION PURPOSES

Action to be taken 2014
Action to be taken after 2014
Continue observing
New well observation added 1st qtr 2014
Action taken on well in 2013

		Well							
Area Location	Well ID	Construction F Date	Construction Field Observations Date 3rd qtr 2012	Recommendation January 2013	Field Observations 1st qtr 2013/Status April 2013	Field Observations 3rd qtr 2013	Recommendation October 2013	Field Observations	Bernmendstin March 2014
								No lock, tag, or cap. Inner casing broken. Protective casing is loose and concrete base is 6" off the	
Unit 1,2,3 Pond Wells	KMW-45	4/7/1998 NA	NA	NA	NA	NA	NA	ground surface. Obstruction 4.4'	Review KMW-5 1st qr 2014 sample results Depending on levels, potentially plug and abandon usine ATV rie or renair
Unit 1,2,3 Pond Wells	KMW-4M	4/7/1998 NA		NA	NA	NA	NA	L or cap	Review KMW-5 1st qr 2014 sample results. Depending on levels, potentially plug and abandon using ATV rig or repair
Unit 1,2,3 Pond Wells	KMW-4D	4/7/1998 NA		NA	NA	NA	NA		Review KMW-5 1st qr 2014 sample result: Depending on levels, potentially plug and abandon using ATV rig or repair
Unit 1,2,3 Pond Wells	KWW-55	4/7/1998 NA		NA.	NA	NA	NA.	Orange brown sample Inner casing- no Joint 3 S feet below TOC No lock and tag	Add fock and tag. Repair casing with Pond 4A. mobilization. Survey after repair
Unit 1,2,3 Pond Wells	KMW-5M	A/7/1998 NA		NA	NA	NA	NA	nple. No d tags	Add lock and tag. Survey
Unit 1,2,3 Pond Wells	KMW-5D	4/7/1998NA		NA .	NA	NA	NA	Sitly sample Inner casing - no joint 3 5 feet below TOC No lock and tag	Add lock and tag Repair casing with Pond 4A mobilization. Survey after renairs
Unit 1,2,3 Pond Wells	KMW-65	A/7/1998 NA		NA	NA	NA	NA	g. No cap. No sing	Review KMW-5 1st qr 2014 sample results. Depending on levels, potentially plug and abandon using ATV rig or repair
Unit 1,2,3 Pond Wells	кмм-ем	4/7/1998 NA		NA	NA	NA	NA	Ď.	Review KMW-5 1st qr 2014 sample results Depending on levels, potentially plug and abandon using ATV rig
Unit 1,2,3 Pond Wells	KMW-6D	A/7/1998 NA		NA	NA	NA	NA	STATE OF THE PARTY OF	Review KNVW-5 1st qr 2014 sample results, Depending on levels, potentially plug and abandon using ATV rig or repair.
Unit 4 Pond Wells	ST-MACS		Yell nearly dry				Nandon, Replace with deaper 4", smaller creen slot kin, and finer filter pack.		Nocause this is near a source area, continue to observe and sample. Replace in Future montplan.
Unit 1,2,3 Pand Wells	P-188				Tocharge slowly. Hand safed dry.		Mandon and replace with 4" well desper		Plug and shandon. Replace with 4" well desper han previous well (Muddy River Workplan)
Unit 1,2,3 Pand Wells			scharge stouty	Abandon and replace pair with one 4" well. Possible ramp required and 8 ATV rg.					Continue to observe. Abandon with Mustdy liver WP mobilisation. Possible replacement with direper well in future workplan.
Unit 1,2,3 Fand Wells.	P-178	986	echarge slowly	Abandon and replace pair with one 4" well. Possible ramp required and R ATV ng.	incharge slowly, Hand silled dry,	Recharge slowly, P Hand balled dry, 5	chandon with Muddy River WP mobilization. Tosible replacement with deeper well in Hure workplan.		Institute to observe. Abandon with Muddy brev WP mobilization. Possible replacement with despet well in Anare workplan.
Unit 4. Pond Weils	CAW-15	10/7/2004 Set	Sity	Rectevelop	edewloped 1st qu 2013	Sity Parameter concentrations remained the same after redeveloping, A	Sity Parameter concentrations (emained the same Redeveloped 1St git 2013 - Inferredeveloping, Abundon (Pond 4A solids removal workplan), Tellow for		Continue to observe. Be rms and wells within bern will remain in place per Pond 4A Solids Removel Wortplan.

Table 5 - Well Maintenace
1st Quarter 2014
NV Energy- Reid Gardner Station
DRAFT FOR PRELIMINARY DISCUSSION PURPOSES

	7		d 1st atr 201	
Action to be taken 2014	Action to be taken after 2014	Continue observing	New well observation added 1st qtr 201	Action taken on well in 2013

		Well	Well Construction Field Observations		Field Observations 1st atr	Field Observations		C Pict	
Area Location	Well ID	Date		Recommendation January 2013	2013/Status April 2013	3rd qtr 2013	Recommendation October 2013	1st qtr 2014	Recommendation March 2014
Unit 4 Rond Wells	CMW-1D	10/1/2004	VI S	Redevelop	Redeveloped 1xt on > 2013	Cloudy, Parameter concentrations remained the same after renewlenting	hadden Board & American		Continue to observe. Berms and wells within berm will remain in place per Porid 4A Solids.
Unit 4. Pand Wells	CMW-25	30/77/2004	Silty	Redevelop			Abandon (Pond 44 solids removal workman) I chairw	A London	Removal workplin  Continue to observe. Berms and wells within  Bermsvill remain in place per Pond. A Solids  Removal Modulus
Unit 4!Pond (Wells	CMW-2D	10/7/2004	Silv	Redevelop		Cloudy Parameter concentrations remained the same after redeveloping.	Abandon (Pond 4A solids removal workplan), Goudy brown	Cloudy brown	Continue to observe. Berms and wells within berm will remain in place per PondatA Solids.
Unit 4 Pond Wells	CMW-45	10/5/2004	Sity	Redevelop	Redeveloped 151 qtr 2013		Abandon (Pond 4A solidy temoval workolen)   Gloudy Rendith	Coudy Readish	Continue to observe. Berms and well within berm will remain in place per Pond'AA Solids Semon's Word with the per pond and the per pond to the per per pond to the per per per per per per per per per pe
Unit 4. Pond Wells.	CMW-4D	10/5/2004	Alls	Redevelor					Continue to abserve. Berms and wells within berm will remain in place per Pond 14 Solids.
Unit 4 Pond Wells	CMW-75	10/8/2004	Sity	Redevelop	Redeveloped 1st qvr 2013	Sifty, Parameter concentrations remained the same	Ažandon (Pond 4A. sol ds. removal womplan), Cloudy		Continue to observe. Berms and wells within berm will remain in place per Pond 44 Solids. Removal Workplan
Unit 4. Pond Wells	CWW-7D	10/8/2104	Alis	Redevelop	Redeveloped Axt qtr 2013	L 0	Abandon (Pond 4A solids removal workplan). Silty		Continue to observe. Berms and wells within Berm will remain in place per Pond 44.Solids Removal Worsplan
Unit 4 Pond Wells	IMW-3D	5/2/1986	Damaged casing*	Repair casing and resurvey	Not accessible	sampled: lowered pump to 80' to prevent drying up Caring not damared	Continue to observe Passible maccurate Erepoting.	age to casing ored.	Continue to observe
Unit 1,2,3 Pand Wells	P-10	5/4/1988	Roots.	Abandon and replace Do at same time as KWW-9.	No roots noted. Dry @ Gals. @ 4 gals	noted Dry	No roots noted Dry Continue to observe. Patentially abandon @ 4 fals.	oted	Continue to observe. Field observation, do not currently, warrant abadonment.
Unit 4 Pond Wells	IMW-25F.	1/20/2011	Roots	Brush clean	No roots noted v	Roots in purge water	1		Continue to abserve
Unit 4 Pond Wells	KWW-20	2/2/2002	Sifty, Hand bailed.	NA	Silty, Hand bailed.	sampled, sifty c	Continue to observe. Roots observed for the first time 03 2013.	ity, roots, sampled	Silty, roots, sampled   Continue to observe and sample.
Unit 4 Pond Wells	WW-1R	8/20/2007	Clear, No roots	NA	Gear, No roots	- 0	Continue to observe. Roots observed for the Rist time Q3 2013.	Roots in sample and on pump	Continue to observe and sample.
Unit 4 Pand Wells	MW-10RR	7/31/2011	Koots	Brush clean	i yelow hue, dry No oots noted Light green (© 13 g15; roots on grey		Continue to observe. Welfreenity installed. No soos pared		Continue to observer and sample

Table 5 - Well Maintenace 1st Quarter 2014 NV Energy- Reld Gardner Station DRAFT FOR PRELIMINARY DISCUSSION PURPOSES

Action to be taken 2014
Action to be taken after 2014
Continue observing
New well observation added 1st qtr 2014
Action taken on well in 2013

		well							
Area Location	Well ID	Construction Date	Construction Field Observations Date 3rd qtr 2012	Recommendation January 2013 2013/Status April 2013 3-rd nr 2013	Field Observations 1st qtr Field Observations 2013/Status April 2013	ons		suo	
					CTOT HIGH CONTO (		vecommendation October 2013	1st qtr 2014	Recommendation March 2014
Unit 1,2,3 Pond Wells	P-1R	12/9/2003 Roots	Roots	Brush dean	Abandoned March 3, 2013 NA	4N	4 2		
							1	AA	VA.
Unit 1,2,3 Pond Wells	p-9	5/4/1988	Roots	Brush clean	Abandoned March 3, 2013 NA	AM	622		
							LA.	YA.	YA.
Former ASP-1,2,3 Wells	IMW-15	7/12/2005	Roots	Plug and abandon	Abandoned March 3, 2013, NA	AM			
							5	NA.	NA NA
Unit 1,2,3 Pond Wells	P-2	10/31/1989	10/31/1989 Damaged casing	Repair casing and resurvey	Repaired 1st qtr 2013. Resurveyed April 2, 2013	N N	41		
				ı	Care de la			II III	AA AA
Unit 4 Pand Wells	BALLA.	4/15/1003			Repaired 1st qtr 2013.				
	44141	4/ 40/ 1393	4/ 10/ 1093 Cacked casing	Repair casing and resurvey	Resurveyed April 2, 2013 OK	N N	NA NA	AN AN	Ab.
Heit A Bond Moll-		a for fores			Repaired 1st qtr 2013.				
SUPPLIED WEIS	MW-S	4/15/1993	4/15/1993 Broken casing	Repair casing and resurvey	Resurveyed April 2, 2013 OK	N NO	AW.	A S	
* Observed 1stqtr 2012								NA NA	NA.

## APPENDIX D (CD) Raw Data and Detection Count Pivot Chart